

# 1 Supporting Statement A for Paperwork Reduction Act Submission

## OMB Control Number 1018-XXXX Bald Eagle Post-Delisting Monitoring

**Terms of Clearance.** None, this is a new collection.

### **1. Explain the circumstances that make the collection of information necessary.**

This information collection implements the requirements of the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA). The bald eagle in the lower 48 States was removed from the List of Endangered and Threatened Wildlife on August 8, 2007. Section 4(g) of the ESA requires that all species that are recovered and removed from the List of Endangered and Threatened Wildlife (delisted) be monitored in cooperation with the States for a period of not less than 5 years. The purpose of this requirement is to detect any failure of a recovered species to sustain itself without the protections of the ESA. There are no corresponding Fish and Wildlife Service (we/Service) regulations for the ESA's post-delisting monitoring requirement.

The bald eagle has a large geographic distribution that includes a substantial amount of non-Federal land. Although the ESA requires that monitoring of recovered species be conducted for not less than 5 years, the life history of bald eagles is such that it is appropriate to monitor this species for a longer period of time in order to meaningfully evaluate whether or not the recovered species continues to maintain its recovered status.

In coordination with States, tribal governments, and other partners, we developed the Post-Delisting Monitoring Plan for the Bald Eagle (*Haliaeetus leucocephalus*) in the Contiguous 48 States (Plan) (attached as a supplementary document). Under this Plan, we will monitor the status of the bald eagle over a 20-year period with sampling events held once every 5 years. The Plan describes the monitoring procedures and methods.

The goal of the Plan is to be able to detect a 25-percent change in occupied bald eagle nests on a national scale at 5-year intervals, with an 80 percent chance of detecting a 25 percent or greater difference between 5-year intervals. If declines are detected, particularly those equal or exceeding the goal, the Service's Bald Eagle Monitoring Team in conjunction with the States will investigate causes of these declines, including consideration of natural population cycles, weather, productivity, contaminants, habitat changes or any other significant evidence. The result of the investigation will be to determine if the population of bald eagles in the lower 48 States warrants expanded monitoring, additional research, and/or resumption of Federal protection under the Endangered Species Act. At the end of the 20-year monitoring program, we will conduct a final review.

### **2. Indicate how, by whom, how frequently, and for what purpose the information is to be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, explain how the collection complies with all applicable Information Quality Guidelines.**

We will monitor the status of the bald eagle by collecting data on occupied nests over a 20-year period with sampling events held once every 5 years. The Plan continues the nest check

monitoring activities conducted by the States over the past years and adds census of area sample plots. The information collection will be done in four parts:

(1) Updating of State nest lists.

(2) Sampling or conducting a census of the list cluster plots in all of the 48 contiguous States and assessing the status of the nest.

(3) In the 14 States with high density bald eagle strata (WA, OR, MT, MN, WI, MI, IL, IA, LA, ME, VA, MD, SC, and FL), area plots will be flown with Service pilots and State biologist observers. Independent dual observers will be used to assess the probability of detection of nests. Other States may be added if they have the interest and the resources can be found.

(4) In these high density stratum States, the nests found in the area survey must be reconciled with the nest lists to determine the new nests found in the area part of the survey. Updating the nest lists in (1) creates the list frame contiguous 48 States, with a complication. We do not use the nests as the sample unit. We cluster them into the 10 km<sup>2</sup>, plots that make up the area frame and the plots with list nests become the primary sampling unit. We need accurate information to assign the nests to plots.

Reporting is described on page 18 of the Plan: The Service will issue a report detailing the results of the first breeding population survey, which will serve as our baseline for future comparison. This report will be available to the public in printed form and on the internet at <http://www.fws.gov/migratorybirds/BaldEagle.htm> within 1 year of survey completion. The report will include a description of the geographic areas surveyed, the survey protocol, and an estimate of the breeding population of bald eagles in the contiguous 48 States. Also, we need the nest location information to issue bald eagle disturbance permits.

Data quality standards are discussed in general on page 16 of the Plan: The survey data sets used in the Bald Eagle Post-delisting Monitoring Plan will adhere to the Service's data quality standards in naming variables and in choosing values those variables can take ([www.fws.gov/stand](http://www.fws.gov/stand)). The metadata for our spatial data will be written according to the Federal Government Data Committee standards <http://www.fgdc.gov/metadata/geospatial-metadata-standards>. The specifics of the standards will be discussed with the data.

### **List Frame**

For each survey period, each of the States in the contiguous 48 States will update their lists of nests to add any new nests that have been reported and identify old nests that were destroyed. This data is already collected by the States. We are only asking that the States provide any changes that they would have made already, not that they actively census the status of known nests and actively look for new nests. To receive consistent information from the States, we provide two ways to make changes to the nest lists: edit the data nest by nests and sighting by sighting or upload the changes in a comma delimited text file. Appendix 3 in the Plan describes the website requirements and data that will be included in the nest list database.

Area Frame for States with High Density Eagle Strata (WA, OR, MT, MN, WI, MI, IL, IA, LA, ME, VA, MD, SC, and FL). We will fly almost all of the area samples with State observers using Jack Hodges record and transcribe programs (see appendix 3 of the Plan). We will collect information from the checklist shown in appendix 3 of the Plan. The observations will also be tagged with GPS coordinates. We will not collect 'distance from the nest' as in the pilot studies.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology; e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden [and specifically how this collection meets GPEA requirements].**

As described above and in appendix 2 of the Plan, the dual-frame survey uses the already collected State nest list information and can obtain a more accurate estimate of occupied nests than either a list- or area-only survey. States will update their nest information and upload files of the changes via the web. For the aerial part of the survey, we use Jack Hodges's program to attach GIS locations to voice recordings. The observations are directly stored in the computer on transcription. The Service has funded the aerial surveys. Migratory Bird Survey will fly almost all of the survey fixed-wing craft. The planes are set up to use Jack Hodges' program and the pilots have experience for using it. All the information collection is entered electronically.

**4. Describe efforts to identify duplication.**

We are using the State nest lists in our estimation. This source of information reduces the area survey to an estimate of new nests, reducing the sample size necessary for the expensive part area of the survey (see table 4 and figure 7 of appendix 1 of the Plan). The nest locations are also needed for State management purposes and for the bald eagle disturbance permits.

The dual-frame survey may seem like a duplication in that we are observing nests as part of the list frame and also the area frame, but it is the 'duplication' that allows us to assess both that a nest is new in a statistically valid way and assess the coverage of the nest lists.

**5. If the collection of information impacts small businesses or other small entities, describe the methods used to minimize burden.**

The only impact of this survey is on small State governments. We are reducing the impact of the survey by using the nest list information they already collect, working with them to convert their nest list data to upload into our database, reducing the area survey sample size using the dual-frame design, and using all electronic data collection.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

As stated in 1, the States and the Service are required by the Endangered Species Act to monitor delisted species. We are surveying for the minimum required 5 years (plus the baseline survey) required by the law. Assessing the nests lists would be less of a burden but would not provide an unbiased, statistically valid estimate on the change in population.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

- \* requiring respondents to report information to the agency more often than quarterly;
- \* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- \* requiring respondents to submit more than an original and two copies of any

- document;
- \* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
  - \* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
  - \* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
  - \* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
  - \* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

There are no circumstances that require us to collect the information in a manner inconsistent with OMB guidelines.

- 8. Provide the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice (or in response to a PRA statement) and describe actions taken by the agency in response to these comments.**

**Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. [Please list the names, titles, addresses, and phone numbers of persons contacted.]**

Before we removed the bald eagle from the Federal List of Endangered and Threatened Species of Wildlife and Plants, we began working with States and others to develop a monitoring plan.

We provided a draft monitoring plan in the proposed rule to delist bald eagles on July 6, 1999 (64 FR 36454). In September 2000, we held a bald eagle monitoring workshop, attended primarily by State biologists involved with bald eagle monitoring.

Pilot studies were conducted in Maine in 2004, and in Florida, Minnesota, and Washington in 2005. In 2006, biologists in Missouri volunteered to test the methods (page 23 of Appendix 1 of the Plan). Participants for these studies are:

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Janell M. Brush Wildlife Research Laboratory - FWRI	Richard J. Baker Animal Research Coordinator / Zoologist

Florida Fish & Wildlife Conservation Commission 4005 South Main Street Gainesville, FL 32601 352-955-2230 <a href="mailto:janell.brush@myFWC.com">janell.brush@myFWC.com</a>	Division of Ecological Services Minnesota Department of Natural Resources 500 Lafayette Rd Box 25 St. Paul MN 55155 651-259-5073 <a href="mailto:richard.baker@dnr.state.mn.us">richard.baker@dnr.state.mn.us</a>
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In 2006, we gave presentations to all (Pacific, Central, Mississippi, and Atlantic) the Non-Game Technical Committees. The committee members' suggestions were incorporated into the design.

On July 9, 2007, we published a notice of availability of the Draft Post-Delisting Monitoring Plan for the Bald Eagle in the Federal Register (72 FR 37373). We solicited comments on the draft Plan, including the information collection requirements for a period of 90 days, ending on October 9, 2007. In the fall of 2007, we gave two web presentations where the State biologists could watch from their computer screen, listen in by phone, and ask questions. The presentations focused on the survey and data collection methods. A list of the web conference participants is available upon request. We considered all comments from the Federal Register notice and the web conferences and addressed them in the Plan.

**Comment:** Adequate funding for monitoring has not been identified.

**Response:** The Service will fund the area frame surveys for the initial baseline survey, including the use of aircraft and pilots to complete the surveys. We will continue to work with the States, tribes, and our other partners to secure funding for future surveys.

**Comment:** Five-year intervals between monitoring are insufficient.

**Response:** In order to assess several generations of bald eagles after delisting, this Plan recommends monitoring bald eagle nesting populations at 5-year intervals (which would follow the development cycle to maturity for one generation) for four generations or a total of 20 years. This exceeds the requirements of the ESA. Many States monitor bald eagle nests on an annual basis because the surveys provide valuable resource data. Some States have indicated that their future bald eagle monitoring will be greatly reduced due to its recovery and the need to allocate funding to other areas. Thus, 5-year survey intervals will provide more data for States where surveys are not otherwise planned. It may also provide a cost savings for other States if they can use these data at 5-year intervals to satisfy their needs.

**Comment:** Twenty-five percent decline is too large of an interval to serve as a trigger mechanism for review.

**Response:** The goal of the Plan is to detect a 25-percent or greater change in occupied bald eagle nests over any period, measured at 5-year intervals based on an 80 percent chance of detecting such a change. We believe this is a goal that both ensures continued recovery under the ESA and is cost-effective. If a 25-percent decline is detected, it means a reduction to a level still recognized as recovered under the ESA. If such declines are detected, we, in conjunction with the States, will investigate causes of those declines. At the end of the 20-year monitoring

program, we will coordinate with States and other partners to conduct a final review and provide recommendations to ensure a properly managed population of the recovered bald eagle.

**Comment:** Implementation involves potential sampling bias due to variable observer experience and familiarity with nesting territories.

**Response:** We have structured training, pre-survey preparation, and survey protocols to minimize potential sampling bias. Though experienced bald eagle observers may be familiar with specific nests, pilot studies showed that the observers were able to change mindsets from “searching habitat” in Area plots to “determining the status of specific known list nests” in List plots, without issue. Using the dual-observer method to determine individual detection probabilities for observers will help account for differences in observer experience. In planning Area plots survey routes, observers will be given maps that show habitat, but not the location of nests, allowing survey route planning to be based on habitat characteristics.

**Comment:** Conducting a large-scale monitoring project every 5 years could create staffing problems.

**Response:** Staffing will require open and clear communication among the States, tribes, and the Service. If State staff are not available for surveys, we will draw upon local Service offices, tribal biologists, retired Service and State employees, and experienced volunteers to fill in as observers.

**Comment:** There is a lack of a comprehensive monitoring program for environmental contaminants.

**Response:** We worked with the U.S. Geological Survey to develop a searchable database/library dedicated to contaminants investigations of bald eagle, osprey, and peregrine falcons. The objective was to create a readily available source of information to consider should the bald eagle (or peregrine) population decline. This database provides biologists an overview of the most recent findings of contaminant effects on these species. If additional studies are needed during post-delisting monitoring, the database will clarify what has been studied and what has not.

**Comment:** The phrase “broad geographic areas” in the section on Habitat implies that the analysis of survey data may be accomplished on something less than a rangewide scale.

**Response:** This is correct. If trends in nest occupancy significantly decline over broad geographic areas, whether rangewide or more regionally, we will investigate a change in available nesting habitat as a possible cause and take appropriate actions, as feasible.

**Comment:** Customized parameters may be required in certain local situations.

**Response:** We agree and have modified the Plan accordingly.

**Comment:** The definition of bald eagle habitat in the Plan, especially the size of water bodies required, may not be appropriate for some geographic regions, especially the Southwest.

**Response:** We modified the Plan to reflect that local conditions may warrant modifications to the habitat being considered. Input from local eagle biologists will be necessary in these unique or localized conditions.

**Comment:** Surveys based on Bird Conservation Regions (BCRs) will not work in some States (e.g., eagle distribution is linear and follows major waterways which cross multiple BCRs).

**Response:** We recognize some of the limitations of this approach, but still maintain it is the most appropriate for application across broad geographic areas. We will work with local biologists to further refine the stratification on a local level.

**Comment:** The boundary between the Northern Pacific Rainforest BCR and the Great Basin BCR, although correctly mapped in the Plan, is an incorrect depiction of the margin between the two ecoregions. This has resulted in inappropriate numbers being used in calculations of nests in the BCR tables in the Plan.

**Response:** We have modified this portion of the Plan to reflect that we will work with local biologists and others to further refine the BCR boundaries to more accurately reflect habitat groupings and, as appropriate, modify calculations of nests and nest densities per BCR.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

We do not provide any payment or gifts to respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

We do not provide any assurance of confidentiality.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.**

We do not ask questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information.**

We estimate 48 responses and 1,478 burden hours for this information collection once every 5 years (during the year of the survey). This is an annualized burden of 16 responses and 493 hours over a 3-year period.

*Updating Nest List Burden - 288 hours*

- States already collect nest locations and status information. We are asking the States to reformat it and upload it to our database. We expect 48 respondents, each taking 6 hours to gather, reformat, and upload the information. States must update the nest list information every 5 years, but may update it more often.

*List and Area Sampling Burden - 534 hours*

- We estimated the flight time and transcription from the pilot studies and the number of plots needed in the survey design. Sample sizes we would need to achieve our survey design goals are found in table 5 of Appendix 1 in the Plan. Using the cost function curves in appendix 1 of the Plan, we calculated the hours of flight time and another third of the time to process the data. The total for the survey is 534 hours for the high density stratum dual frame sampling.

### *Training - 320 hours*

- Training will take a day and may involve 40 persons including observers, crews, and supervisors of the State surveys. 8 hours for 40 people is 320 hours.

### *Maps - 336 hours*

- States with high density strata may have to prepare geographic information system layers of habitat and maps of the sample plots and GPS way point files. To produce this information, it will take each of the 14 States approximately 24 hours, or a total of 336 hours.

We estimate the total dollar value of the burden hours associated with this information collection to be \$53,784 during the survey year (once every 5 years) or \$17,928 annually. This is based on an hourly rate of \$36.39 (including benefits). To obtain the rate for State/local/tribal government, we used data from [http://www.bls.gov/oes/current/naics4\\_999200.htm](http://www.bls.gov/oes/current/naics4_999200.htm), Table 19-1023 -- wildlife biologist mean income (\$24.26). To account for benefits, we multiplied the mean hourly rate by 1.5, for a total of \$36.39. We calculated the benefits in accordance with BLS news release USDL: 08-1802, December 10, 2008.

### **13. Provide an estimate of the total annual [nonhour] cost burden to respondents or recordkeepers resulting from the collection of information.**

We have not identified any nonhour cost burden.

### **14. Provide estimates of annualized costs to the Federal Government.**

We estimate a total cost to the Federal Government for the first survey year to be \$422,000, including \$250,000 for flight time, \$60,000 for a survey assistant, \$20,000 for training, \$6,000 for website development, and \$10,000 for travel. This also includes 6 months of a statistician's time, at \$76,000 including benefits. Over 3 years, the annualized cost would be \$140,667. Note that we are paying the flight time and per diem of the observers during the flights. Observers are also covered by Federal insurance during the flights.

### **15. Explain the reasons for any program changes or adjustments.**

This is a new collection.

### **16. For collections of information whose results will be published, outline plans for tabulation and publication.**

The Service will issue a report detailing the results of the first breeding population survey, which will serve as our baseline for future comparison (see page 18 of the Plan). This report will be available to the public in printed form and on the internet at <http://www.fws.gov/migratorybirds/BaldEagle.htm> within 1 year of survey completion. The report will include a description of the geographic areas surveyed, the survey protocol, and an estimate of the breeding population of bald eagles in the contiguous 48 States.



**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

We will display the expiration date on appropriate materials.

**18. Certification.**

There are no exceptions to the certification statement.